MEMORIAL

TO THE

GOVERNMENT OF THE UNITED STATES,

FROM THE

CITIZENS OF CHICAGO, ILL.

SETTING FORTH THE ADVANTAGES OF THAT CITY AS A SITE

FOR A

National Armory and Foundry.

November, 1861.

BEACH & BARNARD, PRINTERS, 14 SOUTH CLARK STREET, CHICAGO.

MAP
SHOWING THE POSITION OF
CHICAGO
In Connection with the North West & the principal lines of Rail Roads, Canals, Navigable Streams and Lakes, together with the most important Towns, and their distances from Chicago.

DISTANCES FROM CHICAGO

to Albany	970	to Louisville, Ken.	274
Baltimore	731	Detroit, Mich.	283
Boston	1021	Cincinnati, O.	324
Buffalo	540	Toledo,	246
Cleveland,	346	Cleveland,	342
Detroit,	283	Buffalo, N.Y.	540
Harrisburg,	802	Albany,	646
Jersey City,	912	New York,	912
Pittsburg,	468	Pittsburg,	468
Portland, Me.	1111	Philadelphia,	858
Richmond,	1021	Baltimore,	858
Washington,	858	Washington,	858
Boston,	1021	Portland, Me.	1111

Explanation to MAP of ILLINOIS

Coal Formation
Coal Lands in
Adjoining States
Bituminous Coal
Fire Clay
Lead Mines
Salt Works

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MEMORIAL.

The undersigned, having been appointed by a meeting of citizens, by the Common Council and by the Board of Trade of the City of Chicago, a Committee to prepare a Memorial to Congress, asking for the establishment of a National Armory and Foundry in the Northwestern States, and at Chicago, if this shall be found the most elligible site for the purpose, beg leave to submit the following considerations in support of their request:

Passing events demonstrate the necessity of a more prompt supply and rapid distribution of arms than the Government can, at present, command.

Whole armies of loyal men, rallying to its support, have been, and still are, without arms and equipments, and for this want, are forced to remain inactive, while our free institutions are attacked and endangered.

The number of soldiers now (Oct. 20, 1861) enrolled in service of the Government, from the Northwestern States, is 252,000, as follows:

Ohio,	Marched,	51,000	Total,	60,000
Indiana,	"	38,000	"	46,000
Illinois,	"	42,000	"	54,000
Michigan,	"	12,500	"	22,000
Wisconsin,	"	10,000	"	18,000
Iowa,	"	10,000	"	18,000
Minnesota,	"	3,000	"	5,000
Kansas,	"	5,000	"	6,000
Missouri,	"	13,000	"	19,000
Nebraska,	"	1,500	"	2,000
Colorado,	"	1,000	"	2,000
				252,000

It would have been much greater, but for the lack of arms, not enough of which, of good quality, could be found within these bounds, at the outbreak of the present war, to equip a single regiment.

The people of these States,—Ohio, Indiana, Illinois, Michigan, Iowa, Wisconsin, Minnesota, and Missouri,—earnestly desire that the means of producing their own arms, should, with as little delay as possible, be placed in their own hands.

Their commerce with the Gulf of Mexico, by the Mississippi river, is already cut off. Their vast commerce on the lakes, is only carried on by the permission of the British Government,—recently proved to be half unfriendly, which has the power, at any moment, to interrupt it.

It will not, we think, be disputed, that justice and good policy require of the Government, as equal a distribution of arms, and its expenditure for their manufacture in the different sections of the Union, according to population, as can conveniently and safely be effected. Since the destruction of that at Harper's Ferry, there remain two United States Armories,—one at Springfield, Mass., and the other at Watervliet, N. Y., and there is a National Foundry at West Point.

A glance at the present population of the Northern States will show the justice and necessity of locating the third in the Northwest.

POPULATION OF STATES FROM 1840 TO 1860.

EASTERN AND MIDDLE STATES.

	1840.	1850.	1860.
Maine	501,793	583,169	619,958
New Hampshire	285,574	317,976	326,062
Vermont	291,948	314,120	315,827
Massachusetts	737,699	994,514	1,231,494
Connecticut	309,978	370,692	460,670
Rhode Island	108,830	147,545	174,621
New York	2,428,921	3,097,394	3,851,563
Pennsylvania	1,724,033	2,311,786	2,924,501
New Jersey	373,306	489,555	675,812
Delaware	78,085	91,532	112,353
Maryland	470,019	583,034	731,565

WESTERN STATES.

Ohio	1,519,467	1,980,329	2,377,917
Illinois	476,183	851,470	1,687,404
Indiana	685,866	988,416	1,370,802
Iowa	43,112	192,114	682,002
Michigan	212,267	397,654	754,291
Minnesota	.....	6,077	172,793
Missouri	383,702	682,044	1,201,209
Wisconsin	30,945	305,391	768,485
Kansas	.....	.....	143,642
Nebraska Territory	.....	.....	28,893

It is thus seen that about one-half the population of the loyal States, is now found west of the Alleghany mountains, and the ratio of increase points to a day, not distant, when a great majority will be placed in this region.

The country is a vast plain, without natural barriers to defend it, or any of those mountain fastnesses which in other countries have often been proved the strong holds of liberty and national independence. At this moment, its

citizens are arrayed in arms, to defend it from vast armies on the South. From the North it is equally open to attack. It abounds in wealth, particularly in grain and cattle, which are most tempting to ambitious military leaders, and starving armies; its position most nearly resembling Egypt, once free and powerful, but now for centuries subject to foreign domination.

The commerce of Chicago alone, which only dates back about twenty-five years, and is still in its infancy, amounts in value, during the year 1861, to $200,000,000, and added to that of other cities on the lakes, makes a total of over $400,000,000, exceeding in value the entire commerce of the thirty-four United States with all foreign countries, *yet this vast wealth has no other defense than one armed vessel, mounting a single gun.*

It would not be difficult to show, that under the policy of the Government hitherto pursued, the great interests of this extensive region, both as regards encouragement and protection to commerce, and affording means of self-defence, have been greatly neglected, and it will be in vain to hope that compensation for this neglect can be made by establishing another National Armory in any of the Eastern States, even if located at Pittsburgh, on the western slope of the Alleghanies. If the situation of Pittsburgh were further removed than it is from the boundaries of the States in rebellion, and from Harper's Ferry where an Armory was captured, without an effort from loyal States made for its defence,—if the navigation of the Ohio river were less uncertain, and the single trunk of railroad connecting that city with the West less exposed than it is, it would still be true, that, so far as the Northwestern States are concerned, they can be more surely, cheaply, and rapidly supplied with arms from New York or New England, than from that point.

A glance at the map of the Northern States shows that Pittsburgh is actually 114 miles nearer Philadelphia, on the Atlantic coast, than to the city of Chicago. The two great

lines of railroad and water navigation, by canal and lakes, have more abundant facilities of transportion, than the road and canal leading west and to Lake Erie, from Pittsburgh.

If England should ever be induced to make war upon us, in common with the Southern States, the communication between the Eastern and Western States might be greatly embarrassed, if not interrupted, at that neck of land between Lake Erie and the Ohio river, by which the two sections are connected.

It is true that manufactures of iron and other metals have not, as yet, been established in the Northwest, on a scale so extensive as in the older Eastern States, but as the crude materials, and the mechanical skill, are found here, and only require the fostering care of Government to develope vast resources, we conceive this fact so far from being an argument against our request, is, indeed, a strong reason why an Armory and Foundry should be located in this region.

All manufactories established here will not only bind the Western States more firmly to the Union, but will be so much added to the National resources above those which it possesses already. If these, and such other considerations as may suggest themselves, should be sufficient to demonstrate the propriety of locating a National Armory and Foundry at any point in the Northwestern States, it is believed that Chicago presents advantages superior to any other site within their limits. If, on full examination, it should be found otherwise, we will cheerfully yield our claims in favor of the point in those States which shall be shown to be more favorable.

The points most important in reference to the situation of a National Armory are deemed to be,

1st. Geographical position with reference to the region to be supplied with arms, and facilities for cheap and rapid transportation to the points where they may be needed.

2d. Materials required in the construction of works, and in the manufacture of arms and munitions.

3d. The abundant supply of labor and mechanical skill.

4th. Supply and cheapness of motive power.

5th. Healthfulness of location.

6th. Cheapness and abundance of food.

7th. Security from attack by any enemy.

First.—*The geographical position of Chicago, and means of communication with other points.*

Chicago is situated on the western shore of Lake Michigan, 18 miles north of its extreme south point, in lat. 41 deg. 59 min., and long. 87 deg. 38 min. W., at the mouth of the Chicago river, which affords a good harbor. The Illinois and Michigan canal reaches from Chicago to LaSalle, at the head of steamboat navigation on the Illinois river, a distance of 100 miles. This canal is of a capacity to admit boats of 250 tons burthen, and through this channel, and the Illinois river, water communication is established with the Mississippi river and all its tributaries. The distance from Chicago to Cairo by water is 570 miles; from Pittsburg to Cairo is 1216 miles; making 646 miles difference in favor of Chicago. The distance to St. Louis by water is 300 miles; from Pittsburg to St. Louis is 1416; making a difference in favor of Chicago of 1116 miles.

Through Lake Michigan and the Straits of Macinac, Chicago has communication by sail vessels, steamers and propellers, with all the ports on Lake Huron and Michigan.

Through the ship canal of the Ste. de St. Mary, all these vessels are admitted to the navigation of Lake Superior. A line of steamers has for many years plied from Chicago to Superior City, a distance of 700 miles. Through the St. Clair river and lake, and the Detroit river, vessels pass to Buffalo, and all ports on Lake Erie, and so long as peace

is maintained with England, they may pass through the Welland Canal into Lake Ontario.

When it is remembered, that sixty miles of transportation by railroad, is equivalent in cost to 1,000 miles by water, the advantages of this water communication will be duly appreciated. To show more fully the capacity of the lake marine, it may be added that in 1857, the number of arrivals and departures of vessels at the port of Chicago was 7557, with a tonnage of 1,753,413, and during the winter of that year, there wintered in the harbor, seven steamers, twenty propellers, and 214 sail vessels.—(*New American Cyclopedia.*)

But the pre-eminence of Chicago in facilities of transportation is most fully demonstrated by the number and extent of her railroads—thirteen great trunk lines, converging from as many distant and important points, center in her limits. A knowledge of these may be best gained by a glance at the map hereto attached; but the following table, we venture to add, as showing the relative distances from Chicago and Pittsburg, to the places named:

From	Chicago	to	Cairo,	365 miles.
"	"	"	St. Louis,	281 "
"	"	"	Alton,	256 "
"	"	"	Quincy,	268 "
"	"	"	Burlington,	210 "
"	"	"	Fulton,	136 "
"	"	"	Rock Island,	183 "
"	"	"	Galena and Dunleith,	188 "
"	"	"	Prairie Du Chien,	240 "
"	"	"	La Crosse,	280 "
From	Pittsburgh	to	Cairo,	686 miles.
"	"	"	St. Louis,	630 "
"	"	"	Quincy,	648 "
"	"	"	Rock Island,	650 "
"	"	"	Dunleith,	655 "
"	"	"	Prairie Du Chien,	707 "
"	"	"	La Crosse,	747 "

By the above comparison it will be seen that Chicago has the great advantage in distance to carry freight to all the points westerly and southerly, and add to the fact her roads, with one exception, are all one gauge, and upon all the railways now centering in Chicago, the government can obtain to transport troops, arms and munitions of war, 16,000 cars.

All these roads are intersected by other lines crossing them, or have branches diverging, so as to furnish two or more routes to all the more important points which it would be desirable to reach.

SECOND.—*Materials required in the construction of works and in the manufacture of arms and ammunition.*

Stone.—The Athens stone, furnished in inexhaustible quantities from the banks of the Illinois and Michigan Canal, twenty miles from Chicago, is unsurpassed, by any in the world, for beauty, facility of being worked, and for durability. It is furnished at Chicago at $4.00 per cord.

Brick.—Beautiful cream-colored and red brick, of great durability, can be delivered in Chicago for $4.00 per thousand.

Wood and Lumber.—Chicago has been for many years quite the largest lumber market in the world. In 1857, the receipts were as follows: Lumber, 459,639,198 feet; Shingles, 131,832,250; Lath, 80,130,000. The manufactured articles of wood, during the same year, were as follows:

Agricultural implements,	1,134,300
Carriages and Wagons,	948,160
Furniture,	543,000
Sash, Doors, &c.,	1,093,397
Barrels and Wooden-ware,	357,250
New Am. Cyclopedia.]	$4,275,107

The lumber for this market is composed of pine, all varieties of oak, black walnut, cherry, and maple, obtained from the forests of Michigan, Wisconsin, Northern Indiana and Canada, and is cheaper than in any other large market in the United States, and is found in inexhaustible quantities on the shores of all the upper lakes.

Lead.—It is impossible to give an accurate estimate of the production of this metal in the mines of Illinois, Wisconsin and Iowa. In 1857, the amount shipped from Galena alone, amounted to 485,475 pigs, or 34,183,250 lbs. These are the principal lead mines of the United States, and the lead can be transported to Chicago over the Galena and Chicago Union Railroad at 18 cts. per 100 pounds, the distance being 180 miles. Much of the lead of Wisconsin is brought from Mineral Point, which is 30 miles nearer Chicago. Lead is consequently from ½ to 1 cent per lb. cheaper here than in any Eastern city.

Copper.—Nearly the only mines of copper which can be profitably worked in the United States, are those on the south shore of Lake Superior—their product for 1853 was 2,000 tons, and has increased so as to supply, at the present time, a great part of the demands of manufacturers in this country.

This copper can be more easily and cheaply transported to Chicago than to any other large cities excepting Detroit and Milwaukee, and in case of war with England, the transportation of copper here would be less liable to interruption than that to any point further east.

IRON.

Without fear of comparison, it may be said that no city on the continent possesses equal advantages with Chicago, as a point for the iron manufactories, and this, whether we consider the varieties of metal to be had, their unlimited

supply, or the cheap rate at which they can be delivered here. This fact is attested by the rapid progress of their manufactures, thus keeping pace with the gradual and sure development of the immense coal fields lying about the city, and referred to in another part of this paper. The sources of iron supply are various, in enumerating which it will accord with the object of this memorial, briefly to specify the peculiarities of metal received from each.

I. *Lake Superior Iron.*

The deposits of these remarkable ores are distributed through a district of some sixty or eighty miles in extent, on the southern shore of Lake Superior, south and south-east of Keweenaw Bay, and extending to within thirty miles of the mouth of the Escamaba, which empties into Little Bay de Noquet, an arm of Lake Michigan; a railroad now in progress terminates at this point, and intersecting in its route the most extensive and valuable deposits of iron, will, when completed, deliver the metal at Lake Michigan at the same price it is now laid down at Marquette, on Lake Superior. The deposits here are practically inexhaustible. This iron is a grey charcoal iron, and of qualities known as No. 1 and 2—the former adapted particularly for foundries, and the latter for mill purposes—makes strong sound castings, and when run hot, without any shrinkage, while in wrought iron, its ductility and tenacity are unparalleled. It is pre-eminently the No. 1 iron of America, and is used extensively for foundries and machine shops throughout the North, from the lakes to the seaboard. While it has frequently been tested by the side of other iron, in car wheels, car axles and other uses requiring a first class iron, perhaps the experiments most satisfactory to Government would be those made in the hands of Major Wade, of the Ordnance Department, who was employed to test the tenacity of the guns made for Government. Among many varieties of bar

iron, which he tested from localities at home and abroad, the following result of the experiments will show the comparative quality of this iron:

	Strength in lbs. per square inch.	
Iron from Salisbury, Conn.,	58,009,	Johnson & Reeves.
" Sweden,	58,184,	do.
" Pennsylvania,	58,531,	do.
" Essex Co., N. Y.,	58,912,	do.
" England,	68,544,	Brunel.
" Russia,	76,069,	Johnson & Reeves.
" L. Superior, Carp R.,	89,582,	Major Wade.

This iron can be laid down here at from $20 to $23 per ton, a price cheaper than at any other lake port, and which low rate will be lessened still more on the completion of the railroad, which will bring the metal directly to Lake Michigan, and thereby save over the most expensive water route on our lakes, a transport of nearly 400 miles.

II. *Missouri Iron.*

The "Iron Mountain," "Pilot Knob," and "Stephens' Mountain," which yield these valuable deposits, in inexhaustible quantities, are situated about 70 miles southwesterly from St. Louis. These varieties, which do not materially differ in their important charateristics, are all charcoal irons. Nos. 1 and 2 are excellent in castings, and wrought iron. They are extensively known and used, the latter known as their "best charcoal No. 2 iron," is the kind almost exclusively used by the Pittsburgh manufacturers, even at the long distance of transportation, for making their No. 1 boiler plate, and other tough irons. This iron can now be had at the mines at the low rate of $16 per ton, and the freight will not exceed $5 per ton, making this valuable iron cost, delivered in Chicago, from $20 to $22 per ton.

III. *Soft New York and Pennsylvania Iron.*

These Irons, from New York and the northern and north-eastern counties of Pennsylvania, comprise, in their varieties, some of the choicest brand of grey anthracite Iron. They make excellent castings for all kinds of light and heavy mill work. They are brought by water to Buffalo, and can be delivered here at $21 per ton.

IV. *Ohio Iron.*

We would particularly specify the well known varieties of *Massilon* and *Hanging Rock*, both first quality Irons. They are soft and malleable, similar in many qualities to the Scotch pig, and superior for all classes of work. The former can now be afforded here at $22 to $24, and the latter, by the cheap rate of transportation, at $20 per ton.

V. *Tennessee Iron.*

These are grey charcoal Irons, and well adapted for strong, heavy work. They can be cheaply bought here, and now can be had for $20 per ton.

VI. *Indiana Iron.*

This is a charcoal Iron, and, for many purposes, well adapted. It has been used extensively for light castings. It can be delivered here at $23 per ton.

VII. *Wisconsin Iron.*

This grey charcoal Iron is found at Maysville, Wis., on the line of the North-western railroad. It is a soft, brittle iron; but, in castings, runs sharp and perfectly solid. It costs, here, from $15 to $20 per ton.

VIII. "*Scotch Pig.*"

Although almost every distinguishing characteristic to which this long celebrated Iron owes its reputation, is

found in the first two irons in this enumeration, viz.: the Lake Superior and Missouri; still there are qualities of the Scotch Iron which make it desirable to mix it with other kinds of iron for some uses in the foundry. Its qualities are too well known to need any recapitulation here. At no Northern city, save those directly on the seaboard, and at certain seasons of the year they are not an exception, can this iron be delivered at a less cost of freight as at Chicago. From the English or Scotch port to Quebec, and from there here, it is carried at a small, and at times, a nominal rate, for ballast. The choicest brands can now be had here at $25 per ton.

The cost and supply of steel and wrought iron are proportional to those of cast iron; it will not be necessary to go into detail on this subject. It may be interesting to know, that Lake Superior refined Charcoal Iron, worked by hand, tougher than Low More (the best English), can be delivered at Chicago, at from $50 to $75 per ton, and Missouri Iron of the same grade, at the same price, while the cost of the Low More Iron is generally $135 per ton in the Atlantic ports of this country.

Third.—*Supply of Labor.*

The population of the several States, surrounding Chicago, has already been given. We annex, in order to give a more definite idea of the city itself, the following

Table of the Comparative Population of Cities:

	1840.	1850.	1860.
New York	312,710	515,547	814,277
Philadelphia	258,037	408,762	568,034
Pittsburgh	21,115	46,601	49,220
Chicago	4,479	29,963	109,263
Cincinnati	46,338	115,436	160,060
St. Louis	16,469	77,860	162,479

In 1840, it will be seen that when Pittsburgh had

21,115, and Cincinnati 46,338, and St. Louis 16,469, Chicago had but 4,479 people.

In 1860, Chicago, by the above table had increased in the twenty years to 109,263.

This increase so largely in favor of Chicago, over other cities, it is claimed, is on account of her central position; ease of access, and many avenues to concentrate to, and distribute from, to a very large territory, embracing several States.

The population of the city is principally made up of emigrants from various countries of Europe and the eastern States. The following table, taken from the New American Cyclopedia, shows the number of men employed in various manufactures of iron, wood, etc., in 1857. There are to be found, both in the city and the surrounding country, a large number of skillful mechanics, not embraced in the number reckoned as thus employed.

	HANDS.
Iron Works, Steam Engines, etc	2,866
Stoves	70
Agricultural Implements	575
Brass and Tin Ware	351
Carriages and Wagons	831
Furniture	504
Stone and Marble	843
Planing Mills, Sash, Doors, etc	554
Leather	126
Barrels and Wooden Ware	171
Brick	500
Harness and Saddles	220
Sheet and Bar Lead	75
White Lead	10
Types, etc	20
Boots, Shoes and Clothing	1,750
Total	7,436

In 1857, there were in Chicago 137 manufacturing establishments propelled by steam.

4. SUPPLY AND CHEAPNESS OF MOTIVE POWER.

COAL.

The Coal required for an Armory and Foundry would be, (unless the government should desire to smelt its own iron) for the purpose of motive power. Steam is so superior to water power as to be preferred, even when the latter is abundant.

The coal fields of Illinois include an area of 375 miles in length by 200 maximum breadth, (*New Am. Cyclopedia*) and are reached at numerous points from Chicago, by four trunk railroads, and by the Illinois and Michigan Canal. The most northerly point reached by the coal fields is at Morris, 65 miles from Chicago, by the Rock Island railroad, and by the canal, at La Salle, 100 miles from Chicago, the terminus of the canal. There are three veins of vast extent, the lowest is four feet, the middle six, and the upper four feet in thickness. The Rock Island and Illinois Central railroads cross these beds at LaSalle, where they are most extensively worked.

The coal fields most easily accessible from Chicago, stretch southwesterly from LaSalle, on both sides of the Illinois river, from the banks of which it is mined. The veins along the river are of the aggregate thickness of from eight to fourteen feet. These beds, it will be seen, are inexhaustible.

The richness of this coal for steam or motive power, is established beyond a question, by practical trial, and by chemical analysis. (*Prof. Blaney, Prof. McChesney, P. W. Gates, machinist, Chicago.*)

The coal is of the bituminous variety, and contains from forty-eight to sixty-two per cent. of fixed carbon.

The price at Chicago is:

Pure lump, per ton,	$2.00
Nut size of same,	1.50
Fine,	1.25

The best qualities of Ohio coal are sold at Chicago for $3.25 to $3.50 per ton in large lump, and in form suitable for blacksmithing and smelting, at from $2.25 to $2.50 per ton.

The best Lehigh, large lump, $5.00; Pittson, Scranton, ; River Lehigh, $4.00; fine, of best quality for blacksmithing, $2.00.

Charcoal is furnished at Chicago, at from four to five cents per bushel.

5. HEALTHFULNESS OF LOCATION.

The situation of Chicago, on the gravelly shore of a large body of fine water, where there are no unusual sources of disease, is evidently favorable to health. Recently, a system of sewerage has been introduced, by which, the unfavorable effects of the great increase of population, on health, are entirely obviated. The following table, from the Chicago Medical Journal, for May, 1861, is taken, so far as it relates to this city, from the record of interments, and is not liable to any material inaccuracy:

TABLE OF MORTALITY

PER CENTAGE IN SEVERAL OF THE LARGER CITIES OF THE U. S. FOR SEVERAL YEARS PAST.

The large comparative mortality in 1854, it will be recollected, depended upon the Asiatic cholera, especially

cutting down emigrants. The general result of the the table scarcely needs comment. Chicago is a healthy city.

	Boston.	N. York.	Phila.	Balt.	Charles'n.	New Orl's	St. Louis	Cinn.	Chicago
1841—	....	....	....	....	....	....	....	....	....
2—	....	....	....	....	....	....	....	....	....
3—	....	....	....	....	....	....	....	....	1.56
4—	....	....	....	....	....	....	....	....	2.56
5—	....	....	....	....	....	....	....	....	2.38
6—	2.59	2.61	1.70	2.35	2.09	4.13	3.80	....	2.30
7—	3.10	3.46	1.89	2.58	1.82	8.31	4.62	....	2.88
8—	2.84	3.25	1.92	2.76	2.32	6.95	3.86	....	2.60
9—	3.79	4.64	2.28	2.84	2.75	8.05	10.62	....	5.30
1850—	2.64	3.07	1.96	2.49	2.85	6.03	5.04	....	4.72
1—	2.68	4.05	1.97	2.40	2.25	5.25	4.39	....	2.56
2—	2.52	3.63	2.47	2.79	3.59	5.88	4.44	....	3.44
3—	2.80	3.64	2.01	2.58	2.39	10.24	3.32	....	1.99
4—	2.82	4.46	2.39	2.89	4.27	6.57	5.35	....	5.39
5—	2.54	3.43	2.03	2.65	2.18	....	....	....	2.46
6—	2.59	3.06	2.40	2.67	2.86	....	....	....	2.17
7—	2.36	3.16	2.09	2.55	2.36	....	2.88	....	2.17
8—	2.25	3.06	2.00	2.64	....	....	2.92	....	2.04
9—	2.14	2.82	1.77	2.23	....	....	3.05	....	1.75
1860—	2.47	2.79	2.04	2.27	....	....	3.55	....	1.88

6. CHEPANESS AND ABUNDANCE OF FOOD.

Chicago is so well known as the center of a grain growing and stock raising country, that it is unnecessary to enter into details of prices, which are always as much below those of the Eastern States as the cost of transportation. At this moment, her vast store-houses are overflowing, notwithstanding the over-crowded state of transportation routes to the East. The operatives of nearly all the manufacturing establishments of this country, and many of those of Europe, are in great part, fed with corn, and wheat, and beef, and pork, from Illinois, and any action of the Government, tending to encourage manufactures and home consumption of the products of the soil, would essentially promote the agricultural interests of the Northwestern States.

7. SECURITY FROM ATTACK BY FOREIGN OR DOMESTIC ENEMIES.

The distance of this city from the Ohio and Mississippi rivers is so considerable, that even supposing an enemy to cross the former, or to ascend the latter from the Southern States, or descend it from the British possessions, there would still be time and means to defend it. Lake Michigan can readily be rendered inaccessible to hostile fleets by fortifications at the Straits of Mackinac. In case of a war with England, the tug-boats, propellers, steamers, and other vessels on the lakes could quickly be converted to naval uses, manned by our sailors, and armed from our National arsenals; and the large accumulation of *material* of war, at some such point on the lakes, is essential to the safety of that commerce, to the extent of which, we have already alluded. As the great depot for grain and provisions, the occupation of Chicago by a hostile force would be no less calamitous than that of New York or Philadelphia.

The people, like those of the whole State, and those adjacent, are bound to the Union by the strongest ties of interest, the highest considerations of duty, and the deepest sentiments of patriotism, and their security can only be impaired by the neglect of the Government to furnish the people of the Northwest with the means of self defence. It is not too much to assert, that while our Government exists, this city must be secure.

CONCLUSION.

Your memorialists have thus briefly stated the most im-

portant points bearing on the subject, omitting, for the sake of brevity, many of subordinate importance, which will readily suggest themselves to the intelligent reader. We trust that the statement already made, sufficiently demonstrates that materials and means for the manufacture of arms, exist in abundance in the Northwestern States, and only require that fostering care already bestowed by the Government on other sections, to be developed into numerous and valuable articles of industry.

For the comparisons instituted, we have, for the most part, chosen Pittsburgh, because it is a city of well established character, for manufacturing facilities, and because its claims to this armory have already been urged upon the attention of Congress.

By those who may take the pains to compare the figures we have given, with the statements of the Memorial of the citizens of Pittsburgh, it will be perceived, that in regard to building materials, lumber, iron, copper, lead, coal for smelting, provisions, transportation and security, the advantages are in favor of Chicago. In supply of skilled labor, they are fully equal; while, as respects motive power alone, Pittsburgh has the advantage in the cost of bituminous coal. It requires but a little calculation to show that this difference in the cost of coal, for one purpose, is more than counterbalanced by the other considerations which we have named. In healthfulness, Chicago does not suffer by a comparison with any city on the continent. For security, she must certainly take precedence over any city in the vicinity of the Ohio river; while, in the patriotism of her citizens, she may, with the entire State, challenge comparison with any city and State in the Union. Since the fact of the Government owning ground, on which to place an armory, both at Pittsburgh and at Rock Island (in Ill.), has been advanced as an argument in favor of those points, it may be proper to add that, should Congress select Chi-

cago as a site, suitable grounds for the purpose will be furnished free of cost.

All of which is respectfully submitted.

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